


Genetically Engineered American Chestnut Trees for Restoration: An Overview of the Social Science of Stakeholder Engagement

Katie Barnhill-Dilling, PhD, Department of Forestry & Environmental Resources

Biotechnology, the American Chestnut Tree, and Public Engagement
Workshop Report

Principal Investigators
 Jason A. Delborne, Ph.D.
 Andrew R. Binder, Ph.D.
 Louie Rivers, Ph.D.

Research Team
 Jessica Cavin Barnes, Ph.D.
 Katie Barnhill-Dilling, Ph.D.
 Dalton George, M.S.
 Adam Kokotovich, Ph.D.
 Jayce Sudweeks, M.S.



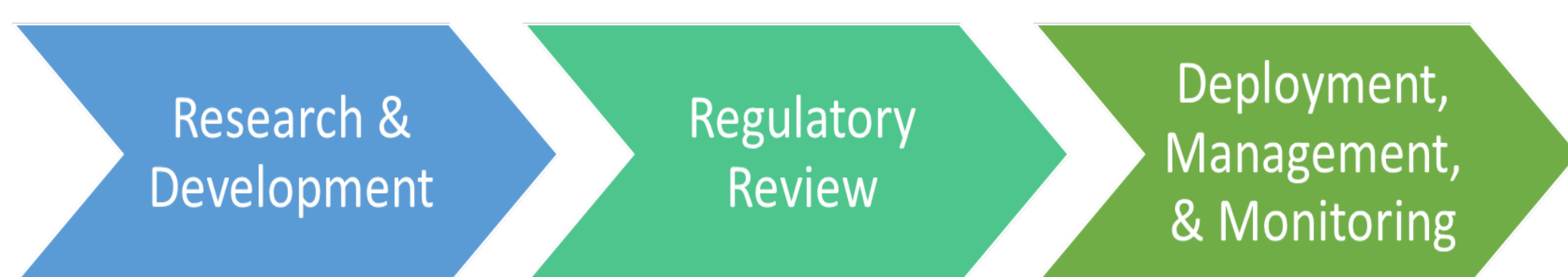
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More attention should be given to the diversity of impacted & interested stakeholders, particularly **sovereign Tribal nations, including Haudenosaunee Confederacy & Eastern Band of Cherokee Indians.**

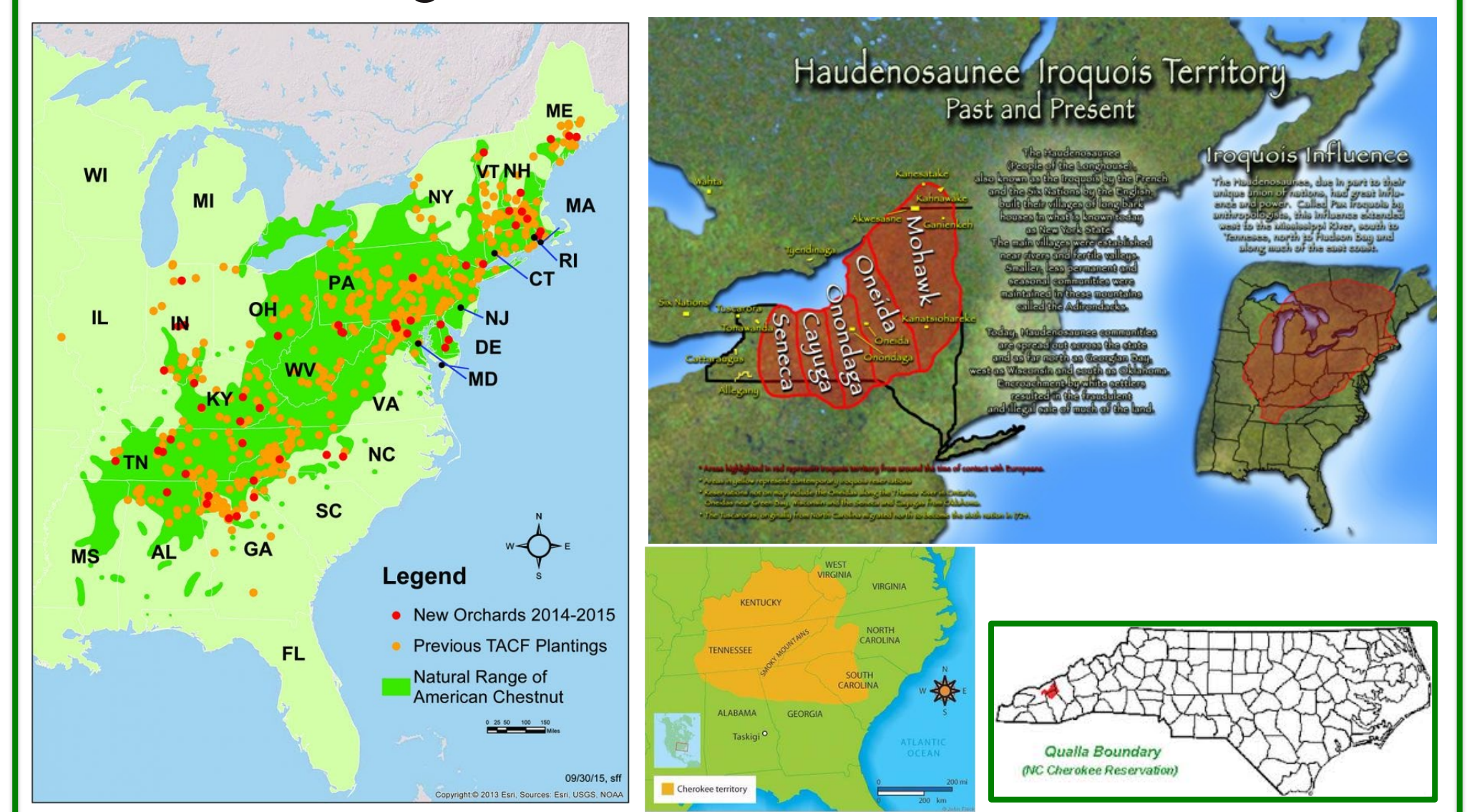
Stakeholder perceptions about using a genetically engineered tree for chestnut restoration are complex & **additional deliberative engagement is needed.**

Deliberation & decision-making should consider environmental justice perspectives: accounting for the variety of **values & worldviews of stakeholders.**

Community, stakeholder, & public **engagement should be organized around 3 decision-phases** of innovation & restoration:



Chestnut range, restoration efforts, & tribal lands



Chestnut restoration may contribute to cultural revitalization efforts **if & only if** tribes participate meaningfully in restoration decision-making.

When in the Deployment, Management & Monitoring phase, chestnut restoration efforts should draw from and build on lessons from **adaptive natural resource management & governance**

If moving forward with using a GE chestnut for restoration, TACF should consider working with social scientists trained in deliberative engagement practices as partners for restoration efforts.

For more information, please see:

Barnhill-Dilling, S.K., Rivers, L. & Delborne, J.A. (2019) (*Society & Natural Resources*) Rooted in recognition: Indigenous environmental justice and the genetically engineered American chestnut.

Barnhill-Dilling, S.K., & Delborne, J.A. (2019). The genetically modified American chestnut as opportunity for reciprocal restoration in Haudenosaunee communities. *Biological Conservation* 232, 1-7. <https://doi.org/10.1016/j.biocon.2019.01.018>

Delborne, J.A., Rivers, L., Binder, A., Barnes, J.C., Barnhill-Dilling, S.K., George, D., Kokotovich, A., Sudweeks, J. (2018). "Biotechnology, the American chestnut tree, engagement." Workshop Report. Available online: <https://research.ncsu.edu/ges/files/2018/10/Biotech-American-Chestnut-Public-Engagement-2018.pdf>

Barnhill-Dilling, S.K. & J.A. Delborne. (2019, May 13). An important community in restoration efforts to protect the American chestnut tree." *Science Trends*. Available online: <https://sciencetrends.com/an-important-community-in-restoration-efforts-to-protect-the-american-chestnut-tree/>

